Suite of Local/Page Applications

Usually installed in IRMs Tue, Sep 30, 1997

The addition of Local Applications (LAs) or Page Applications (PAs) enhances IRM functionality in several ways. This note describes some commonly-installed LAs and PAs.

LAs relating to Internet Protocol (IP) support

ECHO UDP Echo server support.

Returns the same UDP datagram received via UDP port# 7.

TIME Network Time Protocol client.

Collects time-of-day periodically from NTP server via UDP port#123. Updates local IRM time and, optionally, forwards it via IP multicast.

TFTP Trivial File Transfer Protocol server

Supports access to SYSTEM code, LA/PA files, or arbitrary memory.

DNSQ Domain Name Server Query

Maintains local cache of node's IP addresses via queries sent to the laboratory Domain Name Server.

ARPZ ARP Table Zero

Cleans local ARP table during system initialization.

LAs relating to Acnet support

AAUX Acnet Auxiliary function client/server.

Supports acquisition of certain Acnet system tables needed for Acnet communications, both with and without IP. These include the Acnet physical node address table, the token ring-ethernet node table, and the IP address-node tables.

Serves certain Acnet diagnostic requests, such as "Acnet ping," token ring error log counts, Acnet network packet totals, Acnet task name list, request or assign physical node table.

AERS Alarm and Event Reporting System

Shepherds the reporting of alarm messages to the Acnet alarm handler process running on the central operational Vax.

FTPM Fast Time Plot Manager

Supports requests from Vax consoles for data intended to be plotted, including 15–1000 Hz continuous plots, 6–100KHz Swift digitizer snapshots, and 1–10MHz Quick digitizer snapshots.

SLOG Settings Log.

Reports Acnet-relevant device settings originating from any client program that initiates such settings.

DBDL Database Downloading.

Accepts Acnet/DABBEL-initiated database updates for deposit into local

nonvolatile device tables.

PAs used for local system configuration and maintenance

PARM Parameter Page

Displays analog devices in traditional parameter page fashion, one

device per line.

EDAD Edit Analog Descriptors (non-Acnet)

Allows access to view/modify local analog database.

EDBD Edit Binary Descriptors

Allows access to view/modify local digital database

MDMP Memory Dump Page

General memory view/modify diagnostic

LAPP Local Application Parameters Page

View/modify parameters of a selected node's local applications

CRTI CRT Image Page

Operate page applications on a remote node.

DNLD Download Page

Display/list directory of non-volatile memory file system containing

local and page applications and data files.

PAs used for diagnostics

ECHO ICMP Ping, UDP Echo, Network Time, and DNS Query client Page

Four-fold Internet Protocol diagnostics program

NETF Network Frame Diagnostics Page

Display recently received and/or transmitted network frames.

MBLK Allocated Memory Blocks Page

Displays all pSOS-allocated blocks of memory. (local node only)

NVOL Analyze Non-volatile file system Page

PAs used for Data Request protocol testing

REQR Classic request protocol Test Page

ACRQ Acnet RETDAT/SETDAT Test Page

DZRQ DZero request protocol Test Page

DZST DZero setting protocol Test Page

PAs for miscellaneous surveying, management

EVTS Clock Events Page

Display current clock event activity with diagnostic histogramming.

SURV Survey list of nodes Page

Displays/lists set of general characteristics for a list of nodes. Includes CPU board type, system code version date, cycle period, #analog channels, #digital bits, #active requests, maximum free memory, and up-time.

PMEM Print memory from each node in file

Prints some portion of memory from each node in node file.

SLOG Display log of recent settings in a node

The log includes both settings performed upon request frm other nodes or settings initiated by local node; *e.g.*, closed loops, etc. Includes requesting node, setting type, channel#, setting data, and time.

Display/list log of recent Swift Digitizer measurements made by SWFT LA. Includes event#, rate, delay, number of digitized points, and time.